

## **Metal Binding Compounds And Their Use In Cell Culture Medium Compositions**

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### ***Abstract***

10 The present invention is directed generally to metal binding compounds which may be added to cell culture media to replace factors required for cultivation of the cells (e.g. transferrin) which are of animal or human origin. More specifically, the invention is directed to metal binding compounds or complexes thereof comprising one or more transition element cations (such as ferrous or ferric ions), which are added to cell and tissue culture medium compositions. The metal binding compounds may be added to the media alone or may be first complexed with a transition metal ion. The  
15 invention is also directed to methods of use of such compositions, including, for example, methods for the cultivation of eukaryotic cells, particularly animal cells, *in vitro*. The invention also relates to compositions comprising such culture media and one or more cells, and to kits comprising one or more of the above-described compositions. The compositions of the present  
20 invention obviate the need for naturally derived metal-binding proteins, such as transferrin and ceruloplasmin, which may contain blood-borne pathogens.